

## INFORMATION PAPER

### ON

#### ANG F-15 -220E ENGINE UPGRADE PROGRAM

**1. Background.** Currently two ANG F-15 squadrons are undergoing -220E engine upgrades while the five remaining ANG F-15 squadrons operate with F100-PW-100 engines. The basic design production/configuration of the PW-100 engine has operational limitations due to engine age and parts obsolescence. An engine modification/retrofit kit was developed to upgrade these 20-plus year old engines. The PW-220E upgrade kit increases reliability, maintainability, safety and improves overall aircraft performance. The F-16 community is due to provide a finite number of F100-PW-220 engines, however a finite number of -220E kits must be purchased to upgrade the remaining ANG F-15 engine fleet. A total of 283 engine upgrade kits were initially required to complete this effort. To date, 32 of 98 potential flow-down engines have been received. In FY00 - 14 kits were procured, FY02 - 11 kits, FY03 - 10 kits and FY04 - 20 kits were procured. At the conclusion of FY04 a total of 87 engines were upgraded. The FY05 budget appropriated \$14 million for procurement of eight (8) additional upgrade kits.

**2. Requirement.** CAF(AFLC 002-89)-III-A, dated 21 Feb 96.

**3. Impacts If Not Funded.** Combat capability is adversely affected because of decreased operational capability and reduced reliability rates. Existing engines have declining MTBF rates and are subsequently more expensive/difficult to repair. Decreased combat capability of existing engines negatively impacts the F-15 mission.

**4. Units Impacted.**

102 FW Otis ANGB, MA  
131 FW St. Louis IAP, MO  
154 WG Hickam AFB, HI  
173 FW Klamath Falls IAP, OR

125 FW Jacksonville IAP, FL  
142 FW Portland IAP, OR  
159 FW New Orleans NAS, LA

**5. Contractors.** Pratt & Whitney, San Antonio, TX; Boeing Aircraft Co., St Louis, MO

**6. Cost.**

Units Required	Unit Cost	Program Cost
188*	\$2,888,000	\$542,944,000

\* Includes spares, support equipment and installation